

TIMELINE Z

VOLUME 8

ISSUE 03

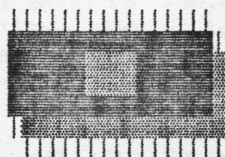
MARCH 1990

\$1.50

CONTENTS:

VIEW FROM RAPTOR
THE WIDJUP Co. PART 3
CLUB INFORMATION

VIEW FROM RAMTOP



Not much to report this month. I am sad to say that another fine TIMEXsinclair club has gone the way side. BoSTUG of The Boston Computer Society mailed out their last newsletter. They decided to break up the group for the same reasons any group would disband. We will surely miss them. Eight years ago BoSTUG was the major force in the establishment of the BCS according to Peter Hale, editor of the BoSTUG Newsletter. Peter states that the QL users have started an independent New England Sinclair QL User Group (NESQLUG) that will continue support in the area and produce a quarterly newsletter at the same address as before with a \$10.00 annual fee for membership. Contact is:

Richard Taylor
309 Holly Circle
Tiverton, RI 02878

Don't forget the 1990 SINCLAIR COMPUTER EXPOSITION presented by S.M.U.G. this June 2 & 3 in Milwaukee, Wisconsin. There will be seminars, door prizes, swap shop, software, peripherals, hardware, and lots of other stuff.

LOCATION: Waukesha Holiday Inn
(414) 786-0460

ADDRESS: Hwy 18 and
I-94
Waukesha, WI

FOR MORE INFORMATION
CONTACT:

Bill Heberlein
5052 N. 91st Street
Milwaukee, WI 53225

>> OR <<

Neal Schultz
call 7 - 10 pm
(414) 353-4522

THE WIDJUP Co. PART III (final)

I have enclosed my printed circuit board CAD program for SHAREWARE distribution throughout your membership groups and others. You be the judge about how an advanced application can be supported by the much maligned, but phoenix-like the TIMEXsinclair 2068.

CAD#3.B1 sidesteps around TIMEX barriers which many deny exist. All I can say is: "You mean I can't do THIS?". THIS is impressive!

When I made the ROM BYPASS and simple MEMORY BANK SWITCHING public domain, I included the design of the WIDJUP PRIMARY ADAPTOR and a proposed standard for back-planes. This design completes the data required to add back-planes (and all the power that gives) to that inherently SUPERIOR computer.

Even without BANK SWITCHING or IBM BUSS COMPATIBILITY, all existing hardware can be simply adapted to plug in. New hardware, like half way decent parallel interfaces, can be made with two edges. One edge plugs in for the minimum bus configuration -- the other for IBM compatibility with BANK SWITCHING. The adaptor is compatible with existing hardware, but new products would better be consistent with the new standard.

For those who have tight budgets (or fists), the entire investment to implement a back-plane is less than \$90 for the minimum configuration. That for IBM compatibility will be somewhat more, but the savings through the use of clone boards makes that trivial.

The buss driver card is the only item not yet detailed. For the minimum system, all the design data has already been given.

The figures show both of the PRIMARY ADAPTOR. These were generated using CAD#3.B1 using PUBLIC DOMAIN data files donated in the interests of TS2068 users everywhere. The board uses plated through hole technology. Though not recommended, the files can be edited to produce a "stitched" board with more holes and pads. Also possible is a single sided layout with many jumpers. Suit yourself.

The only active circuit on the board is the 74LS11 chip which completes address decoding for the TS2040 or modified ZX printer. This makes all the formerly interfering I/O addresses available for new uses.

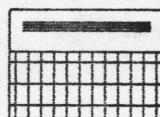
Support For
sinclair

ZX81 - spectrum - QL

and

TIMEXsinclair

1000 - 1500 - 2068



CAMBRIDGE

288

computers

TT
II
MM
EE
LL
II
NN
EE
ZZ

TIMEXsinclair user group News-Magazine

SUPPORT FOR:

TIMEXsinclair's
1000, 1500, 2068

Sinclair's
ZX Spectrum+ 128K
Quantum Leap (QL)

Cambridge's Z88

FRONT

PAGE

PRINTED USING
sinclair QL
PROFESSIONAL
COMPUTER AND
THIS PROGRAM.

DESK-TOP PUBLISHING
FOR THE SINCLAIR QL
=====

TIMELINEZ INFORMATION

TIMELINEZ news-magazine is published and is © Copyright 1989 by American Micro Systems, San Jose, CA 95121. **TIMELINEZ** may be freely copied for non-commercial use only. Reproduction in whole or in part for commercial means is prohibited by law. **GIVE CREDIT!!**

SUBSCRIPTIONS: \$15.00 a year for ten issues (U.S./funds only - make checks payable to American Micro Systems). All other countries please write for details on surface and air mail rates.

CHANGE OF ADDRESS: Please notify us by phone or by letter to any changes in your current mailing address to prevent delay or even loss of service.

RENEWAL TIME? Starting January 1990, all subscriptions will be due on the first month of every year (renewals due every January). Your mailing label will show printed "January 19XX", where "XX" shows **STARTING** month of next subscription period. New subscribers joining mid-year will receive issues from the previous Jan. All subscribers due in mid 1990 will be pro-rated to finish off the rest of the year (Each subscriber will be contacted by letter as to the cost of pro-rate.

NOTICE: Contributors to **TIMELINEZ** are independent of American Micro Systems and opinions expressed in the contents of this publication are not necessarily those of the management staff or its advertisers. American Micro Systems will not be held liable for any damage or consequences resulting from instructions, assertions of fact, review of products or companies provided in the magazine's content. It is recommended that anyone attempting to modify their computer or constructing an electrical project should seek help from more knowledgeable individuals.

Managing Editor: Andy Hradesky
Co-Editors:
T/S-PUG: George Mockridge
T/S-SUU: Bill Miller-SinLink
TCW T/S_SOG: Mark Wahl
TAS-BAM, Inc: George Featherman
Warren Reed

Printing - Decollating - Mailing
Bob Orrfelt
George & Sonya Mockridge

N/L Exchange:
T/S-PUG: George Mockridge
T/S-SUU: Bill Miller (SLIX)
TAS-BAM: George Featherman

Advertising Schedule:
Full Page: \$20.00
Half Page: \$10.00
1/4 Page: \$ 5.00
1/8 Page: \$ 2.50

American Micro Systems
2175 Aborn Rd. #262
San Jose, CA 95121
(408) 270-9730
CompuServe ID# 72267,3572

Make all N/L Exchange correspondence to:

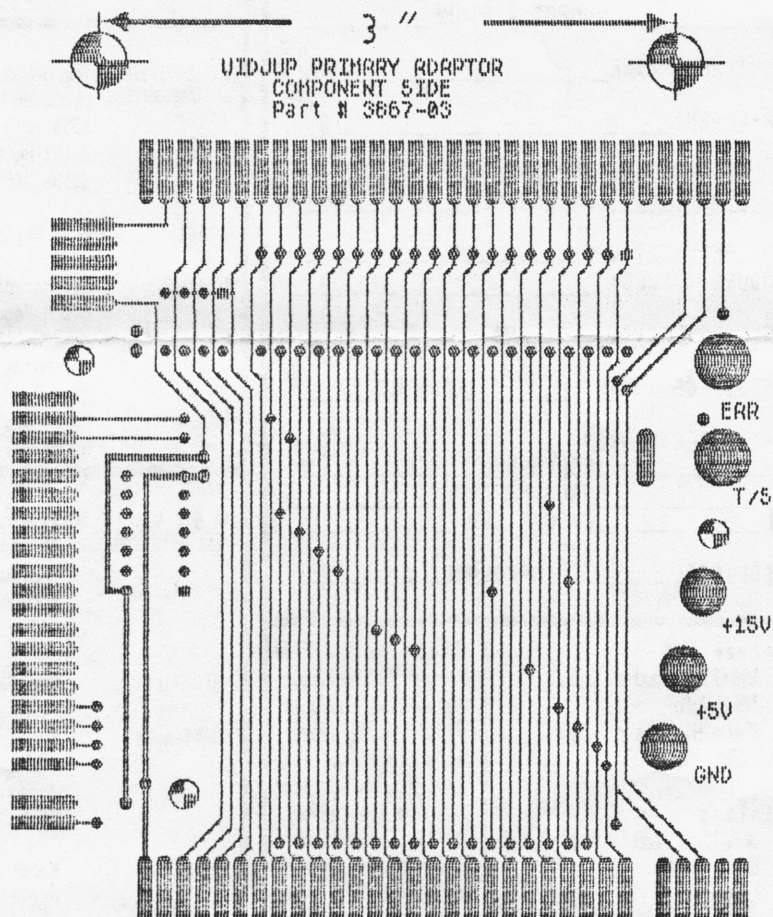
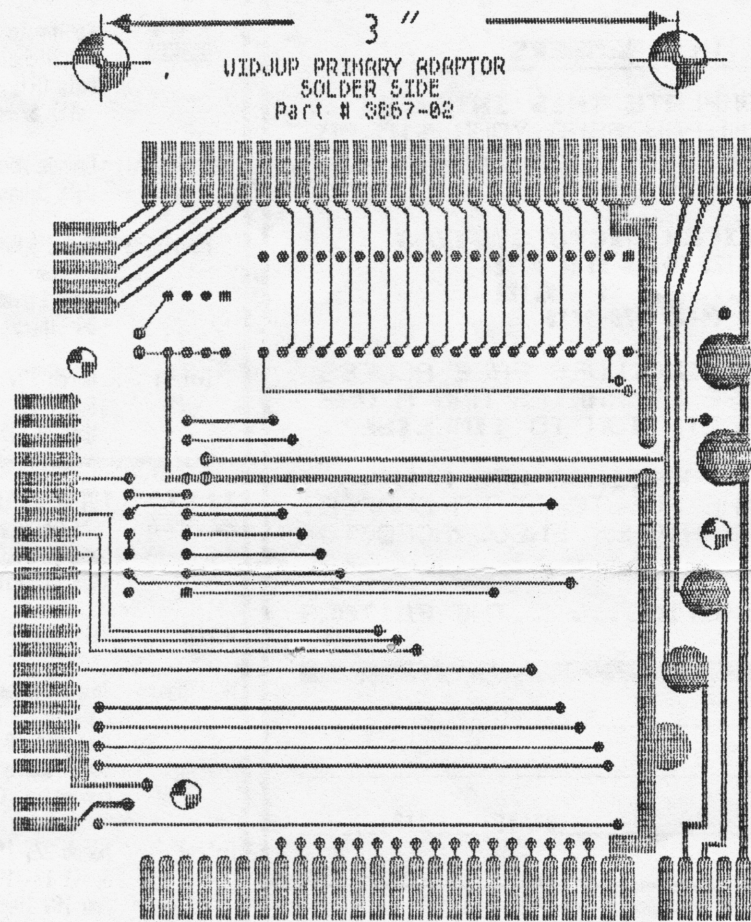
TIMELINEZ
P.O. Box 1312
Pacifica, CA 94044
ATTN: George Mockridge

Back issues of **TIME-LINEZ**, 7/83 thru 12/87
Contact Bill Miller at:

SinLink
6675 Clifford Drive
Cupertino, CA 95014

Issues 1/88 - present,
contact your editor at
American Micro.

The PDSE Library is
now available to all;
covering T/S1000-1500,
T/S 2068, Spectrum and
the QL.
Contact **American Micro**
for further details.



POTENTIAL NEW MEMBERS

PLEASE COMPLETE THIS INTEREST CARD BELOW AND SEND YOUR \$15.00 MEMBERSHIP WITH YOUR CHOICE USER GROUP TO:

AMERICAN MICRO SYSTEMS

2175 Aborn Road #262
San Jose, CA 95121
(408) 270-9730

MEMBERSHIP INCLUDES FREE ACCESS TO THE PDSE LIBRARIES AND A ONE YEAR SUBSCRIPTION TO TIMELINEZ.

USER GROUP MEETINGS ARE ALWAYS OPEN TO THE PUBLIC AT NO CHARGE. GUESTS ARE HIGHLY ENCOURAGED TO ATTEND.

HAPPY COMPUTING.....THE EDITORS

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ WORK#: _____

HOW DID YOU HEAR ABOUT US?
FEST _____ COMPUTER STORE _____

NEWSPAPER/MAGAZINE _____

MEMBER/FRIEND _____

WORK WITH A COMPUTER AT YOUR JOB?
YES _____ NO _____ MAKE/MODEL _____

DO YOU OWN A COMPUTER? YES _____ NO _____
MAKE/MODEL (YOURS) _____

IS IT YOUR FIRST? YES _____ NO _____

COMPUTER EXPERIENCE (YEARS) _____ (MONTHS) _____

PROGRAMMING INTERESTS ARE?
BASIC _____ ASSEMBLY _____
FORTH _____ MACHINE CODE _____
PASCAL _____ C COMPILER _____

KNOWLEDGE: SOFTWARE _____ HARDWARE _____

Mini File Server BBS

Supports: 300/1200 baud at 8,N,1
Password: "fishwife"
Sysop: Steve Nichols
Phone#: (408) 253-2295

Netware Divisions

Supports: 300/1200/2400 baud at 7,1,E
Terminal: VT52
Sigop: Kevin Lueng
Phone#: (415) 753-5265

NOTE: The Mini File Server BBS has been supporting the Unix files system since it's start. It is strictly an U/D load BBS via X-modem or ASCII. For further information, please contact Bill Miller.

PUG

Peninsula User Group
311 Michelle Lane
Daly City, CA 94015
(415) 878-1773

Support for:
-TIMEXsinclair's
1000/1500/2068
-Cambridge Z88
-Sinclair's
Spectrum +128K
and QL

President: George Mockridge
Host: Walt Johnson

Meetings: Third Sunday of each month, 1:30 pm
Peninsula Hospital
1783 El Camino Real
Burlingame, CA

Dates: March 18, 1990 June 17, 1990
April 22, 1990 ==> ONE WEEK LATER DUE
May 20, 1990 TO EASTER DAY ON 15th

TSSUU

TIMEXsinclair Cambridge Silicon Valley Users
6675 Clifford Drive
Cupertino, CA 95014
(408) 253-3175

Host: Bill Miller

Meetings: Third Wednesday of each month - 7:00 pm
Cupertino Library Bring your equipment
Community Room down access ramp
10400 Torre Avenue Leading to bottom of
Cupertino, CA 95014 circular building

Dates: March 27, 1990 4rd Tuesday
April 18, 1990 3rd Wednesday
May 16, 1990 3rd Wednesday
June 20, 1990 3rd Wednesday

TAS-BAY, INC.

Tampa and Suncoast Bay Area Micro-
computer Users' Group, Inc.
5956 46th Avenue North
Saint Petersburg, FL 33709
(813) 546-4278

Hosts: Eric Best, George Featherman, Warren Reed

Meetings: Second Saturday of each month, 7:30 pm
Beach Federal Savings and Loan
7777 North Seminole Blvd.
Seminole, FL

Dates: March 10, 1990 May 12, 1990
April 14, 1990 June 9, 1990

TSC Sig TICU

TIMEXsinclair Cambridge S.I.C.
The Computer Workshop
558 Cypress Avenue
Sunnyvale, CA 94086
(408) 739-3977

SIG Host: Mark Wahl

Meetings: Every Saturday morning at 10:00 am
Stanford University
Jordan Hall (in the Quad)
Room 380C (downstairs)

Dates: March 3, 10, 17, 24, 31, 1990
April 7, 14, 21, 28, 1990
May 5, 12, 19, 26, 1990

The first personal computer for under \$200.

The Sinclair ZX80.
A complete computer—
only \$199.95 plus \$5.00 shipping.

Now, for just \$199.95, you can get a complete, powerful, full-function computer, matching or surpassing other personal computers costing several times more.

It's the Sinclair ZX80. The computer that "Personal Computer World" gave 5 stars for 'excellent value.'

The ZX80 cuts away computer jargon and mystique. It takes you straight into BASIC, the most common, easy-to-use computer language.

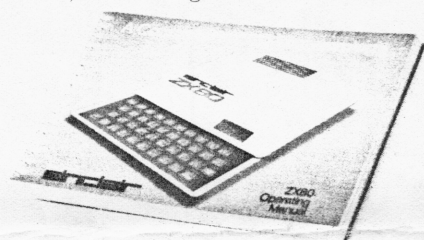
You simply take it out of the box, connect it to your TV, and turn it on. And if you want, you can use an ordinary cassette recorder to store programs. With the manual in your hand, you'll be running programs in an hour. Within a week, you'll be writing complex programs with confidence.

All for under \$200.

Sophisticated design makes the ZX80 easy to learn, easy to use.

We've packed the conventional computer onto fewer, more powerful LSI chips—including the Z80A microprocessor, the faster version of the famous Z80. This makes the ZX80 the world's first truly portable computer (6½" x 8½" x 1½" and a mere 12 oz.). The ZX80 also features a touch sensitive, wipe-clean keyboard and a 32-character by 24-line display.

Yet, with all this power, the ZX80 is easy to use, even for beginners.



Your course in computing.

The ZX80 comes complete with its own 128-page guide to computing. The manual is perfect for both novice and expert. For every chapter of theory, there's a chapter of practice. So you learn by doing—not just by reading. It makes learning easy, exciting and enjoyable.

You'll also receive a catalog packed with items that can make your ZX80 even more useful. Including 27 program cassettes, from games and home budgeting for just \$6.95, to Sinclair's unique Computer Learning Lab (a workbook, six cassettes with 100 lessons, and two cassettes for storing programs).

ZX80's advanced design features.

Sinclair's 4K integer BASIC has performance features you'd expect only on much larger and more expensive computers.

- Unique 'one touch' entry. Key words (RUN, PRINT, LIST, etc.) have their own single-key entry to reduce typing and save memory space.

- Automatic error detection. A cursor identifies errors immediately to prevent entering programs with faults.
- Powerful text editing facilities.
- Also programmable in machine code.
- Excellent string handling capability—up to 26 string variables of any length.
- Graphics, with 22 standard symbols.
- Built-in random number generator for games and simulations.

Sinclair's BASIC places no arbitrary restrictions on you—with many other flexible features, such as variable names of any length.

And the computer that can do so much for you now will do even more in the future. Options will include expansion of 1K user memory to 16K, a plug-in 8K floating-point BASIC chip, applications software, and other peripherals.

Order your ZX80 now!

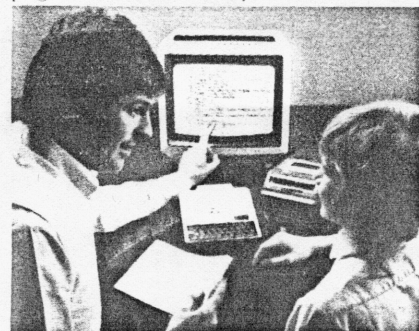
The ZX80 is available only by mail from Sinclair, a leading manufacturer of consumer electronics worldwide.

To order by mail, use the coupon below. But for fastest delivery, order by phone and charge to your Master Charge or VISA.

The ZX80 is backed by a 10-day money-back guarantee, and a 90-day limited warranty which can be extended by 12 months under Sinclair's extended service program for \$25.00.

Price includes TV and cassette connectors, AC adaptor, and 128-page manual.

All you need to use your ZX80 is a standard TV (color or black and white). The ZX80 comes complete with connectors that easily hook up to the antenna terminals of your TV. Also included is a connector for a portable cassette recorder, if you choose to store programs. (You use an ordinary blank cassette.)



The ZX80 is a family learning aid. Children 10 and above will quickly understand the principles of computing—and have fun learning.

To order call toll free: 800-543-3000.

In Ohio call: 800-582-1364.

Ask for operator #508.

Phones open 24 hours a day, 7 days a week.

sinclair

Sinclair Research Ltd., 475 Main St.,
P.O. Box 3027, Wallingford, CT 06492.

To: Sinclair Research Ltd., 475 Main St., P.O. Box 3027, Wallingford, CT 06492.

Please send me _____ ZX80 personal computer(s) at \$199.95 each (US dollars), plus \$5 shipping. (Your ZX80 may be tax deductible.) For Conn. deliveries, add sales tax.

Send me _____ Computer Learning Lab(s) at \$49.95 each.

Register me for _____ extended service program(s) at \$25.00 each.

I enclose a check/money order payable to Sinclair Research Ltd. for \$_____.

Name _____

Address _____

City _____

State _____

Zip _____

Occupation _____

Age _____

Intended use of ZX80 _____

Have you ever used a computer? ☐ Yes ☐ No Do you own another personal computer? ☐ Yes ☐ No

PO-3-1

WIDJUP Primary Adaptor PROVIDES

1. Connection of your TS2068 to a back-plane expansion board, available on the clone market.
2. An RGB MONITOR edge take-off.
3. An EXTENDER edge which can accept either the usual TIMEX, or common 70/72 pin closed-end type connectors with a key.
4. An edge for connecting your TS2040 or modified ZX printer. (The full address is decoded.)
5. Jacks for EAR and Tape/Sound.

(MORE)

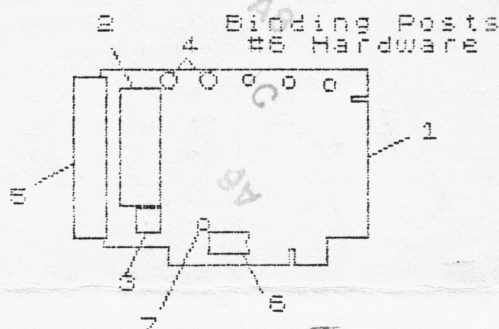
WIDJUP Primary Adaptor

6. Terminals for GND and IOAS for DR. STRANGEQUARK'S SUPER-DUPER JOY GENERATOR, a joystick port interface adaptor; or for TAPE motor control.
7. Terminal Posts for GND, +5V & +15V power to other devices.

PARTS LIST

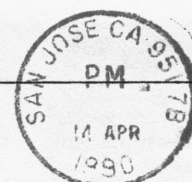
- | | | |
|---|------|--|
| 1 | 1 ea | Circuit board |
| 2 | 1 ea | 40 pin DIP socket |
| 3 | 1 ea | 8 pin DIP socket |
| 4 | 2 ea | miniature panel jack. |
| 5 | 1 ea | TIMEX or equiv 64 pin edge connector w/key |
| 6 | 1 ea | 74LS11 3x3inp AND |
| 7 | 1 ea | Capacitor, .1uf |

WIDJUP Primary Adaptor



PARTS LOCATION

AMERICAN MICRO SYSTEMS
2175 ABORN ROAD #262
SAN JOSE, CA 95121



U.S. POSTAL SERVICE
OFFICIAL SPONSOR
1992 USA OLYMPIC GAMES



January 1990

Mr. Donald S. Lambert
3310 Clover Drive S.W.
Cedar Rapids, IA 52404

FIRST CLASS MAIL